

(19) 世界知的所有権機関
国際事務局(43) 国際公開日
2004 年 8 月 12 日 (12.08.2004)

PCT

(10) 国際公開番号
WO 2004/067474 A1

(51) 国際特許分類: C04B 35/50, 35/44

(21) 国際出願番号: PCT/JP2003/000750

(22) 国際出願日: 2003 年 1 月 27 日 (27.01.2003)

(25) 国際出願の言語: 日本語

(26) 国際公開の言語: 日本語

(71) 出願人 (米国を除く全ての指定国について): 神島
化学工業株式会社 (KONOSHIMA CHEMICAL CO.,
LTD.) [JP/JP]; 〒541-0043 大阪府 大阪市 中央区高麗
橋 4 丁目 2 番 7 号 Osaka (JP).

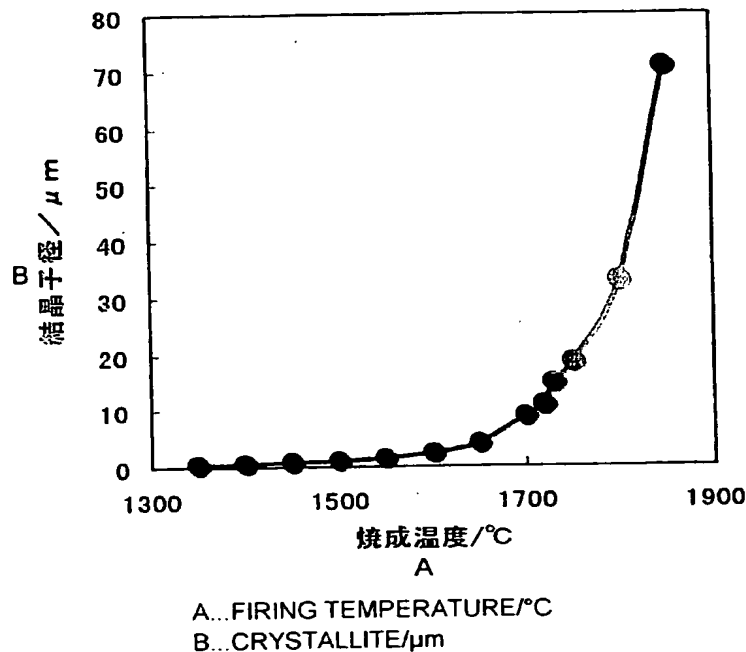
(72) 発明者; および

(75) 発明者/出願人 (米国についてのみ): 柳谷 高公
(YANAGITANI, Takagimi) [JP/JP]; 〒769-1101 香川県
三豊郡 詫間町詫間 3 5 0 0-2 Kagawa (JP). 八木 秀喜 (YAGI, Hideki) [JP/JP]; 〒769-1501 香川県 三豊郡
豊中町大字比地大 8 7 0-1-2 0 6 Kagawa (JP).(74) 代理人: 塩入 明, 外 (SHIOIRI, Akira et al.); 〒659-
0093 兵庫県 芦屋市 船戸町 4 番 1-4 0 9 号室 Hyogo
(JP).(81) 指定国 (国内): AE, AG, AL, AM, AT, AU, AZ, BA, BB,
BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK,
DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,
NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
ZA, ZM, ZW.(84) 指定国 (広域): ARIPO 特許 (GH, GM, KE, LS, MW, MZ,
SD, SL, SZ, TZ, UG, ZM, ZW), ユーラシア特許 (AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM), ヨーロッパ特許
(AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB,

[続葉有]

(54) Title: RARE EARTH GARNET SINTERED COMPACT

(54) 発明の名称: 希土類ガーネット焼結体とその製造方法



(57) Abstract: A rare earth garnet sintered compact which is produced by subjecting a rare earth garnet powder such as YAG to a pre-sintering, sintering the pre-sintered product by HIP, and annealing the sintered product at 1100 °C to 1600 °C in a whole oxygen atmosphere under a whole pressure of 4.5 MPa or more, and has an average crystallite diameter of 0.9 to 9 μm, an optical loss coefficient of 0.002 cm⁻¹ or less and a strain of a transmitted wave of 0.05 λ cm⁻¹ or less.

[続葉有]



GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI
特許 (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG).

添付公開書類:

— 国際調査報告書

規則4.17に規定する申立て:

— USのための発明者である旨の申立て (規則
4.17(iv))

2文字コード及び他の略語については、定期発行される
各PCTガゼットの巻頭に掲載されている「コードと略語
のガイダンスノート」を参照。

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/00750

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ C04B35/50, 35/44

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ C04B35/50, 35/44

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1926-1996	Toroku Jitsuyo Shinan Koho	1994-2003
Kokai Jitsuyo Shinan Koho	1971-2003	Jitsuyo Shinan Toroku Koho	1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2001-158660 A (Kamishima Kagaku Kogyo Kabushiki Kaisha), 12 June, 2001 (12.06.01), Claims; Par. No. [0015] (Family: none)	1-4
A	US 5075267 A (Sumitomo Electric Industries, Ltd.), 24 December, 1991 (24.12.91), Claims; column 2, line 63 to column 3, line 14 & JP 2-229764 A Claims; page 2, lower right column, line 17 to page 3, upper left column, line 11 & EP 385510 A1	1-4

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
17 April, 2003 (17.04.03)

Date of mailing of the international search report
30 April, 2003 (30.04.03)

Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/00750

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2001-89225 A (Sumitomo Electric Industries, Ltd.), 03 April, 2001 (03.04.01), Par. Nos. [0026], [0029], [0030] (Family: none)	1-4
A	JP 11-130428 A (Director General of National Institute for Research in Inorganic Materials of Science and Technology Agency), 18 May, 1999 (18.05.99), Par. No. [0026] (Family: none)	1-4
A	JP 2001-158620 A (Shin-Etsu Chemical Co., Ltd.), 12 June, 2001 (12.06.01), Par. No. [0010] (Family: none)	1-4